

ABSTRACT OF THE DISCLOSURE

A method for generating an XML file having a nesting structure equivalent to the topology structure of an object in an image. Under the method, the topology of an object having a structure including multiple binary branches is traced, while XML elements representing nodes and describing attributes and configuration of the structure are simultaneously generated. This produces an XML file having a nesting structure describing the topology structure of the object. Attributes are added to the nodes in the XML file that specify rotations and transformations of line elements such that the geometry of the skeleton is specified. The XML file is generated in such a manner that it may be rendered as a scalar vector graphics file. The generated XML file may be used in further processing to store attributes representing physical properties of the structure without requiring a location referencing system.